motor rotates, it utilizes hydro pressure to support its shaft. If its shaft deviates, pressure should be added from the deviated side to make the shaft return to the correct position. However, since hydrostatic bearings usually contain a lot of lubricant, they are not suitable for small rotating machine parts that require high precision.--

Please replace the paragraph beginning on page 2, line 1, with the following rewritten paragraph:

--On the other hand, the hydrodynamic bearing is a bearing with tiny grooves located at the bearing's inner aperture. Within the grooves there is a lubricant (since the grooves are tiny, the quantity of lubricant is quite limited). When the shaft rotates, the lubricant inside the grooves is drawn and builds up hydrodynamic pressure to support the shaft at a centered position. However, since it is hydrodynamic, friction occurs when the shaft starts to rotate and pressure has not yet been built up. It is also very difficult to process the inner aperture inside the bearing, and difficult to control the processing precision (the grooves' width is usually 100 μm, and the grooves' depth are even smaller). Moreover, there are problems with the lubricant seal and lubricant filling.--

Please replace the paragraph beginning on page 3, line 8, with the following rewritten paragraph:

--The manufacturing method of the hydrodynamic and hydrostatic hybrid bearing of the invention involves first forming a bushing, and then forming several dynamic pressure generating grooves on it. The bushing is integrated on the housing with the porous material inside, which contains lubricant. A shaft is installed within the bushing. The housing is pre-pressurized and sealed. Since the bushing is a kind of penetrated dynamic pressure generating groove processed independently, it is very easy to process. Also, because the porous material of the housing contains a lubricant, it is easy to fill and seal lubricant. Moreover, since the housing is pre-pressurized, it can store a suitable amount of lubricating media between the bushing and shaft. Therefore, starting friction can be avoided, and the bearing has both hydrodynamic and hydrostatic effects.--

Please replace the paragraph beginning on page 4, line 11, with the following rewritten paragraph:

--The hydrodynamic and hydrostatic hybrid bearing and its manufacturing method disclosed in the invention (shown in Fig 1) contain one shaft 10, one housing 20 and one bushing 30. The housing 20 is frame shaped, contains porous material 40, and can preserve the lubricant 50. One side of the housing is sealed with a

sealing unit 70, so as to prevent the lubricant from being exposed. In the middle of the porous material 40 there is a space, which can be used to install the bushing 30. The bushing 30 has a cylindrical shape and is used to install the shaft 10. The bushing 30 contains a plurality of penetrated dynamic pressure generating grooves 301 on its surface. Lubricant 50 contained in the porous material 40 can ooze through these dynamic pressure generating grooves 301, to achieve the effects of lubrication and support.--

Please replace the paragraph beginning on page 4, line 21, with the following rewritten paragraph:

--In other words, the bushing 30 utilizes a processing method different from the previously discussed well-known inner aperture processing methods. It uses an independent processing means of penetration (see Fig 2), and then is installed in the housing 20 with porous material 40 inside. In this way, the surface of the inner aperture of the shaft 10 also contains dynamic pressure generating grooves 301. However, since the bushing 30 is processed independently, it makes processing easier. Also, processing methods can be more diverse. They are not restricted by the tiny size of the inner aperture, and the shape and precision of the dynamic pressure generating grooves 301 are not confined. As shown in Fig 2, the dynamic pressure generating grooves 301 are herringbone when it rotates opposite to the inner shaft 10. The lubricant on both

sides of the dynamic pressure generating grooves 301 is led to be concentrated in the middle and produces hydrodynamic pressure, which supports the shaft 10 in the middle of the bushing 30. While a V-shape is shown for example, the groove is not restricted to this shape. Any shape that can serve to build up hydrodynamic pressure while rotating is suitable. Furthermore, since the bushing is processed independently, the shape of the dynamic pressure generating groove 301 can be more diversified.--

Please replace the paragraph beginning on page 5, line 13, with the following rewritten paragraph:

--The porous material 40 inside the housing 30 contains a lubricant 50 (for example, lubricating lubricant). The porous material 40 should be pre-pressurized before sealing, and then sealed by a sealing unit 70 (for example, sealing glue and sealing cover, etc.) to prevent the lubricant from spilling out. Since pre-pressure 60 is added, the lubricant 50 flows out from the dynamic pressure generating grooves 301 of the bushing 30. It is kept between the bushing 30 and the shaft 10 (because of the equilibrium between sticky force and atmospheric pressure), as shown in Fig 3. As mentioned above, since the dynamic pressure generating grooves 301 are very tiny, just like a capillary, the lubricant can be kept between the bushing 30 and the shaft 10. Also, the amount of lubricant 50 can be adjusted to an optimum level by controlling the

magnitude of pre-pressure. In a normal situation, when the shaft has not started moving, it will provide hydrostatic protection to avoid starting friction in the hydrodynamic bearing, and provide hydrodynamic and hydrostatic hybrid effects. On the other hand, since the bearing uses a lubricant 50 contained in the porous material 40, it is easy to fill and seal the lubricant. Moreover, the porous material 40 provides lubricating tank functions. When the lubricant 50 between the bushing 30 and the shaft 10 spills out, it presses the lubricant 50 out by pre-pressure 60, to re-supply the amount of lubricant 50 between the bushing 30 and the shaft 10.--

Please replace the paragraph beginning on page 6, line 4, with the following rewritten paragraph:

--As shown in Fig 4, in the manufacturing method of the hydrodynamic and hydrostatic hybrid bearing in the invention, the bushing is first formed (step 901). As shown in Figs. 5A and 5B, a cylinder-shaped bushing 30 with appropriate thickness *t* is formed, and then several penetrated dynamic pressure generating grooves 301 are processed on the bushing. As mentioned above, there are many kinds of dynamic pressure generating grooves 301, and two groups of herringbone are shown in Figs. 2 and 5C. A cutter process, etching or plastic injection can be used as a processing method. Since the dynamic pressure generating grooves are formed outside the bushing